**BRUHAT BANGALORE MAHANAGARA PALIKE**

**NAME OF THE PROJECT:** **Providing Sculpture/ Murals at Parks, Lakes, and Junction in yelahanka Assembly constituency.**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Est.Cost.Rs. | 20000000.00 |
| Sl No | Description of Item | Unit | No | L | B | D | Qty | Rate | Amount |
| 1 | KSRB 2-2 : Earthwork excavation by manual means for foundation of buildings, water supply and sanitary lines and electrical conduits etc, either in pits or in trenches 1.5m and above in width, in soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. including breaking of clods complete as per specifications. KSRB 2-2.1: – do – in ordinary soil. No. KBS 2.1(a) / 2.3.5 KBS Pg No 6, Item No 2.3 | | | | | | | | |
| | **Footings** | | | | | | | | |
| | C1 | Cum | 3 | 5 | 5 | 2 | 150.00 | | |
| | Basic rate | | | | | | | 299.00 | |
| | Area weightage 8% | | | | | | | 23.92 | |
| | **Total** | | | | | | **150.00** | **322.92** | **48438.00** |
| 2 | KSRB 2.8 : Providing and Filling in foundation with granite / trap broken metal 100mm. and down size, with approved sand including hand packing, ramming, watering, including cost of all materials and labour with all lead and lift. complete as per specifications. Specification No. KBS Pg No 7, Item No 2.15 | | | | | | | | |
| | **Footings** | | | | | | | | |
| | C1 | Cum | 3 | 5 | 5 | 0.15 | 11.25 | | |
| | Basic rate | | | | | | | 2429.00 | |
| | Area weightage 8% | | | | | | | 194.32 | |
| | **Total** | | | | | | **11.25** | **2623.32** | **29512.35** |
| 3 | KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix M15 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @0.878cum and fine aggregtes @ 0.53cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation,plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2, Pg No. 13 Item No. 4.6 | | | | | | | | |
| | **Footings** | | | | | | | | |
| | C1 | Cum | 3 | 5 | 5 | 0.2 | 15 | | |
| | Basic rate | | | | | | | 5919.71 | |
| | Area weightage 8% | | | | | | | 473.5768 | |
| | **Total** | | | | | | **15.00** | **6393.2868** | **95899.30** |
| 4 | KSRB 4-1.5 : Providing and laying in position plain cement concrete of Mix M20 with OPC @ 300kgs, with 20mm and down size graded granite metal coarse aggregates @0.69cum and fine aggregtes @ 0.43cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM curing complete as per specifications. Specification No. KBS 4.1, 4.2 Pg No. 13 Item No. 4.5 | | | | | | | | |
| | PCC at Flooring | Cum | 3 | 5 | 5 | 0.15 | 11.25 | | |
| | Basic rate | | | | | | | 5950.14 | |
| | Area weightage 8% | | | | | | | 476.01 | |
| | **Total** | | | | | | **11.25** | **6426.15** | **72294.201** |
| 5 | KSRB 2.3 : Filling available excavated earth ( excluding rock ) in sides of foundations upto plinth in layers not exceeding 20 cms. in depth, compacting each deposited layer by ramming after watering with lead upto 50 m. and lift upto 1.5 m. including cost of all labour complete as per specifications. Specification. No. KBS 2.9, Pg No.7, Item No.2.10 | | | | | | | | |
| | **Filling Available of Excavated Earth** | | | | | | | | |
| | Earth Work Excavation | Cum | | | | | 150.00 | | |
| | PCC for Footing | Cum | | | | | -15.00 | | |
| | Filling in foundation with granite / trap broken metal | Cum | | | | | -11.25 | | |
| | Footing Concrete Quantity | Cum | | | | | -89.81 | | |
| | Basic rate | | | | | | | 201.00 | |
| | Area weightage 8% | | | | | | | 16.08 | |

| Sl No | Description of Item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | **Total** | | | | | | **33.94** | **217.08** | **7368.34** |
| 6 | Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge. Pg No 136,Item No17.4 | | | | | | | | |
| | Excavated Earth | Cum | | | | | 150.00 | | |
| | Filling Available of Excavated Earth | | | | | | -33.94 | | |
| | Loading and unloading item no.17.1 KSRRB M 100-1 | Cum | | | | | | 57.00 | |
| | Basic rate for haulage of materials as per item No. 17.4 KSRRB : M 100 - 4.1 | t.km | For surface roads exluding Basic rate loading & unloading | | | | | 2.00 | |
| | Average Weight of earth | For2Kms =2x1.28x2 | | | | | | 5.12 | |
| | Basic rate | | | | | | | 62.12 | |
| | Area weightage 8% | | | | | | | 4.97 | |
| | Total | | | | | | **116.06** | **67.09** | **7786.22** |
| 7 | KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2, Pg No 16, Item No 4.28 | | | | | | | | |
| | **Footings** | | | | | | | | |
| | C1 | Sqm | 3 | 20 | | 0.3 | 18.00 | | |
| | | | | | | | | | |
| | Pedastals | Sqm | 3 | 16.62 | | 1.35 | 67.31 | | |
| | | Circular Area of pedastals 3.14*(4.6)^2/4=16.62 | | | | | | | |
| | Basic rate | | | | | | | 258.00 | |
| | Area weightage 8% | | | | | | | 20.64 | |
| | Total | | | | | | **85.31** | **278.64** | **23769.96** |
| 8 | KSRB 4-6.6 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for columns, pillars,post and struts, circular or curved in plan including cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 Pg No 16, Item No 4.33 | | | | | | | | |
| | | | | | | | | | |
| | Pedastals | Sqm | 3 | 16.62 | | 1.35 | 67.31 | | |
| | | Circular Area of pedastals 3.14*(4.6)^2/4=16.62 | | | | | | | |
| | Basic rate | | | | | | | 913.00 | |
| | Area weightage 8% | | | | | | | 73.04 | |
| | **Total** | | | | | | **67.31** | **986.04** | **66367.45** |
| 9 | KSRB 4.2.1 : Providing and laying in position reinforced cement concrete of Design mix M25 with OPC cement @ 340kgs, with 20mm and down size graded granite metal coarse aggregates @0.70 cum and fine aggregtes @ 0.47cum, with super plasticisers @ 3 liters confirming to is 9103-1999 reafirmed-2008 at machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation for footings, pedastals, retaining walls, return walls, walls (any thickness) including attached pilasters, columnspillars, posts, struts, buttresses, bed blocks, anchor blocks & plinths etc., including cost of all materials, labour, HOM of machinery, curing, complete but excluding cost of reinforcement as per specifications. Specification No. KBS 4.1, 4.6, Pg No. 14, Item No. 4.10 | | | | | | | | |
| | **Footings** | | | | | | | | |
| | **C1** | Cum | 3 | 5 | 5 | 0.3 | 22.5 | | |
| | | | | | | | | | |

| Sl No | Description of Item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | **Pedastals** | Cum | 3 | 16.62 | | 1.35 | 67.31 | | |
| | | Circular Area of pedastals 3.14*(4.6)^2/4=16.62 | | | | | | | |
| | Basic rate | | | | | | | 6517.09 | |
| | Area weightage 8% | | | | | | | 521.37 | |
| | Total | | | | | | **89.81** | **7038.46** | **632103.09** |
| 10 | KSRB 4.9.2 : Providing T.M.T bars Fe 500 steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 Pg No.18 Item No.4.46.2 | | | | | | | | |
| | **Ground Floor** | | | | | | | | |
| | Footing | Cum | Concrete Quantity | | | | 89.81 | | |
| | | kg | Steel assumed 100 Kg/Cum of Concrete | | | | 8980.71 | | |
| | | tonne | | | | | **8.96** | | |
| | Basic rate | | | | | | | 87417.00 | |
| | Area weightage 8% | | | | | | | 6993.36 | |
| | **Total** | | | | | | **8.96** | **94410.4** | **845916.83** |
| 11 | PROVIDING, SUPPLYING, INSTALLATION, TESTING AND COMMISSIONING OF 9 MTS LED ART TOWER LIGHTING (1 UNIT) with custom design of Design supply erection and commissioning of burgeon shaped tree. a) Fabrication of external dimension of structure is dia 4472mm at ground dia 9634mm at top height 9075mm from ground. b) The structure has total of 10 no. Of horizontal support 7 nos of 4472mm dia,1nos Of 6193 mm dia, 1nos Of 7914 mm dia, 1no Of 9634mm dia c) Horizontal anular rings are made up of 25mm od 2mm thick MS tubes rolled into arc with CNC machine for accurate and repeatable shapes. d) The structure has 18 to 20 no. Of vertical supports around the vertical rings equi spaced made up or 25mm od MS tube 2mm thick and bent into tree shapes. e) The structure is degresed and coated with zinc chromate primer at dispatched for effective corrosion protection. f) The burgeon tree structure is split into minimum of 4 sectors for ease of erection transportation and availability of material, at site the 4 sectors will be welded or mechanically fastened., g) 1800 nos LED Pixel Dot, Color: RGBW, Protection: IP65, Power consumption: 1.44W, PixelHousing Transparent PC Milk white diffuser, Control: SPI,DC5/12/24V, RGBW Pixels: 4 Channels, Working temperature: -20~85, Automatic address code. h) 1 nos Master Controller DVI, work with computer online, can be compatible with pixel editing software. i) 2 nos Slave controller, DMX 512/ SPI, Power 5W, Ac input 110-240V, 50Hz, working temperature -30 D to +65D.j) 20 nos DC power driver, Power: 350W, Input: AC 110-240 V AC, 50Hz, Output: DC5/12V, Protection: rainproof. k) 200 nos PVC insulated multi core electrical unarmored flexible 3Cx2.5 Sqmm power cable having lessel ectrical losses.This PVC insulated and round sheathed wire features a bright multistrands copper conductors and it supports voltage grade upto 1100V.(As per actuals depending upon the site condition). l) 500 mts PVC insulated multi core electrical unarmored flexible 2Cx1.5 Sqmm power cable having less electrical losses.This PVC insulated and round sheathed wire features a bright multistrands copper conductors and it supports voltage grade upto 1100V.(As per actuals depending upon the site condition). m) 120 mts LAN/ RJ45 comprises twisted pairs with shield support for carrying of data isused for connecting all light consoles that use DMX 512 standard data transmission.(As per actuals depending upon the site condition). n) 1 nos Power Distribution Board made up of MS Sheet metal fabricated housing black powder coated and ivory connectors for the internal terminations and external outgoing connecting points,fibre/brass glands of suitable size fitted MCB control for outgoing circuits.6No Nos of 16A SP Outgoing MCB's. 1No of 16A TPN Incoming MCB. o) 4 nos IP driver box made up of MS Sheet metal fabricated housing black powder coated and ivory connectors for the internal terminations and external outgoing connecting points,fibre/brass glands of suitable size fitted MCB control for outgoing circuits and Programming with different designs as per the requirement. And 100 set of T & I connectors with cable for driver loop and additional accessories for installing the lights as per the final drawing / site conditions consisting of clamps, brackets, angles, conduits, joints, hardware like fasteners, nuts & bolts etc., Complete in all respect as per direction of Engineer incharge of the work. (Approved Data Rate) | | | | | | | | |
| | **LED ART TOWER WITH LIGHTING (Approved Data Rate)** | Nos | 3 | | | | 3.00 | | |
| | **Total** | | | | | | **3.00** | **5850000.0** | **17550000.00** |

| Sl No | Description of Item | Unit | No | L | B | D | Qty | Rate | Amount |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Sub Total Amount | 1829455.73 |
| | | | | | | | | GST Charges (12% of estimated cost) | 219534.7 |
| | | | | | | | | Total data Rate items | 17550000.0 |
| | | | | | | | | 1% of DPR | 200000.00 |
| | | | | | | | | 1% of PMC | 200000.00 |
| | | | | | | | | Miscellaneous and Rounding off | 1009.59 |
| | | | | | | | | Grand Total | 20000000.00 |

CERTIFICATE:

1) The work spot has been inspected and found to be necessary

2) The work spot comes under B.B.M.P

3) The provisions made in the estimate are necessary and minimum.

4) The estimate is based on C.S.R of 2018-2019, Issue Rates and approved rates.

Assistant Engineer
BBMP

Assistant Executive Engineer
BBMP

Executive Engineer
BBMP

RUDRAPRASAD CONSULTANTS BANGALORE

Administrative Sanction for Rs. 200.00 Lakhs
Rupees Two Crore Only
is accorded under head P-2178
Works Sanctioned by Dy. Mayor Grants
Registered as CE No. 19 Subject
to conditions contained in enclosed memo
No. BBMP/EE/Ym-0/As/19/2022-23 Dt. 01/06/2022

Executive Engineer

Technical Sanction
Accorded For Rs 200 Lakhs only
Head of A/C P2178
CER NO : 76A Dt: 08/02/2022